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**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/460,471

12/14/99

VINCENT

D

C-1034-026

MAR 27 2000

IM62/0323

EXAMINER

HENDERSON & STURM

204 SIXTH AVENUE

SUITE 1210

DES MOINES TX 50309-4076

COY.N

ART UNIT

PAPER NUMBER

1742

DATE MAILED:

03/23/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/460,471		Applicant(s) VINCENT, DENIS	
	Examiner Nicole Coy		Art Unit 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
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- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

1) ☒ Responsive to communication(s) filed on 14 December 1999.

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-7 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-3 and 5 is/are rejected.

7) ☒ Claim(s) 4, 6 and 7 is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some * c) ☒ None of the CERTIFIED copies of the priority documents have been:

1. ☒ received.

2. ☐ received in Application No. (Series Code / Serial Number) _____.

3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

14) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 15) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 16) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> .	17) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. 18) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 19) <input type="checkbox"/> Other: _____
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Application/Control Number: 09/460,471

Page 2

Art Unit: 1742

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1-2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derwent Abstract RD 199034A.

Derwent Abstract RD 199034A discloses the invention substantially as claimed. Derwent Abstract RD 199034A discloses a new white gold alloy which has the composition by weight

70-80% Au

3-20% Pd

0-10 % Cu

0-10 % Ag

0-5% Zn

and 0-10 %In (abstract).

However, Derwent Abstract RD 199034A does not specifically disclose the composition of the components as in the claims.

Application/Control Number: 09/460,471

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Art Unit: 1742

Since Derwent Abstract RD 199034 disclose the composition of the steel in which the components and ranges meet or overlap those being claimed, the disclosure establishes a prima facie case of obviousness. *In re Malagari*, 182 USPQ 529.

3. Claim 3 is rejected under 35 USC 103 as being unpatentable over Derwent Abstract RD 199034 in view of Steinke et al.

Derwent Abstract RD 199034 discloses the invention substantially as claimed.

See above paragraph 2.

However, Derwent Abstract RD 199034 does not disclose Ga in amounts between 0.2% and 0.4%.

Steinke et al. teaches Ga in amounts of 0 to 4 % in gold alloys in the same field of endeavor for the purpose of lowering the melting range and improving flowability (Col. 3, lines 3-10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add Ga in an amount of 0.2 to 0.4 % to a white gold alloy in order to improve the properties of a white gold alloy.

Allowable Subject Matter

4. Claims 4, 6 and 7 are allowed.

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Art Unit: 1742

5. Claims 4, 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The closest prior art, Derwent Abstract RD 199034A does not disclose adding Ti in amounts of 20 ppm to 200 ppm for the purpose improving the surface finish. Japanese Patent 199034 A is silent as to amounts of Ti in a white gold alloy. Since the applicant specifies that titanium must be present at a concentration of between 20 and 200 ppm, claims 4, 6, and 7 are allowable.

Conclusion

6. The prior art made of record and not relied upon is considered general background information.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole Coy whose telephone number is (703)308-3860. The examiner can normally be reached on Monday-Friday 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Prince Willis, Jr. can be reached on (703)308-3050. The fax phone numbers for the organization where this application or proceeding is assigned are

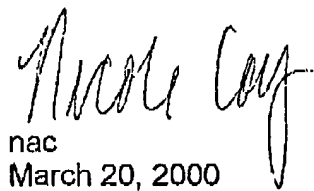
Application/Control Number: 09/460,471


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(703)305-3599 for regular communications and (703)305-7719 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0651. _


nac
March 20, 2000


David M. Jenkins
Gaby Brenner

Notice of References Cited				Application/Control No.		Applicant(s)/Patent Under Reexamination			
				09/460,471		VINCENT, DENIS			
				Examiner		Art Unit			
				Nicole Coy		1742			
				Page 1 of 1					
U.S. PATENT DOCUMENTS									
*		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	DOCUMENT SOURCE **		
							APS	OTHER	
<input type="checkbox"/>	A	5240172	Aug. 1993	Steinke et al.	228	262.61	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	B	5298219	Mar. 1994	Toyofuku et al.	420	507	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	C	2980998	Apr. 1961	Coleman	32	12	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	D	2274863	Mar. 1942	Leuser	75	165	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	E	4014690	Mar. 1977	Dudek et al.	75	165	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	F	4522783	Jun. 1985	Menicucci	420	503	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	G	4997723	Mar. 1991	Tanaka	428	606	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	H	5876862	Mar. 1999	Shibuya et al.	428	672	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	I	5945065	Aug. 1999	Kikuchi et al.	420	507	<input type="checkbox"/>	<input type="checkbox"/>	
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<input type="checkbox"/>	K						<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	L						<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	M						<input type="checkbox"/>	<input type="checkbox"/>	
FOREIGN PATENT DOCUMENTS									
*		DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUBCLASS	DOCUMENT SOURCE **	
								APS	OTHER
<input type="checkbox"/>	N	RD 199034 A	Nov. 1980	Derwent	Int Gold Corp	--	--	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	O	JP 2922227 B	Oct. 1989	Japan	Tokuriki	--	--	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	P	JP 09184033 A	Jan. 1996	Japan	Tanaka	--	--	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Q							<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	T							<input type="checkbox"/>	<input type="checkbox"/>
NON-PATENT DOCUMENTS									
*		DOCUMENT (Including Author, Title Date, Source, and Pertinent Pages)						DOCUMENT SOURCE **	
								APS	OTHER
<input type="checkbox"/>	U							<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	V							<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	W							<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	X							<input type="checkbox"/>	<input type="checkbox"/>

*A copy of this reference is not being furnished with this Office action. (See Manual of Patent Examining Procedure, Section 707.05(a).)

**APS encompasses any electronic search i.e. text, image, and Commercial Databases.
U.S. Patent and Trademark Office

Atty. Docket 6-1034-026

PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Denis VINCENT

Serial No.: 09/460,471
(claiming priority of European Patent
Application No. 98811224.9, filed December 14, 1999)

Filed: December 14, 1999

For: NICKEL-FREE GREY GOLD ALLOY

RESPONSE UNDER 37 C.F.R. 1.111

BOX NO FEE AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

This is in response to the Office Action of March 23, 2000.

Therefore, this Response is due by June 23, 2000.

Reconsideration and withdrawal of the outstanding objections and/or rejections are respectfully requested in view of the remarks which follow.

REMARKS

Claims 1-7 are presented for reexamination .

THE INVENTION

The present invention is directed to a Nickel-free Grey Gold Alloy.

I hereby certify that this Response is being
deposited with the U.S. Postal Service as First Class
Mail, postage prepaid, in an envelope addressed to:
Assistant Commissioner for Patents, U.S. Patent and
Trademark Office, Washington, DC 20231 onJune 22, 2000
Dicki J. Shepherd

SUMMARY OF THE OFFICE ACTION

1. Claims 1-3 and 5 have been rejected under 35 U.S.C. 103(a). Claims 1-2 and 5 as being unpatentable over Derwent Abstract RD 199034A. Claim 3 as being unpatentable over Derwent Abstract RD 199034A in further view of STEINKE, ET AL., U.S. Patent No. 5,240,172.
2. The subject matter of the claims 4, 6 and 7 is allowable.

RESPONSE TO OFFICE ACTION

Applicants respectfully traverse the rejection of claims 1-3 and 5 under 35 U.S.C. 103(a).

The Examiner state in the present Office Action that while the Derwent Abstract RD 199034A does not specifically disclose the composition of the components as in the claims, the components and ranges meet or overlap those being claimed. Therefore, the disclosure establishes a prima facie case of obviousness. The Examiner relies on *In re Malagari*, 182 USPQ 529. Applicant disagrees with the Examiner's conclusion and reliance upon the case.

Initially, Applicant points out that *In re Malagari* is reported at 182 USPQ 549, not 529. In *Malagari*, the Court was dealing only with one element with the remaining elements being "precisely disclosed in the references as applied by the examiner and . . . employed in the industry. . ." Furthermore, the court was relying on the preferred ranges of the cited references. Additionally, *Malagari* is essentially about the ability of the applicant to show unexpected results as a rebuttal to the particular fact pattern in the case to overcome the obviousness rejection. Therefore, Applicant wishes to respectfully point out that the application of this case to the instant case would require a significant stretch of any reasonable reading of the case. Nevertheless, and more importantly, Applicant will point out that the entire issue is moot inasmuch as the disclosed ranges of the reference and as claimed do not overlap for all components.

In rejecting claims 1-2 and 5 under 35 U.S.C. 103(a), the Examiner has apparently inadvertently misstated the alloy disclosed in the Derwent Abstract RD 199034A reference as:

70-80% Au
3-20% Pd
0-10% Cu
0-10% Ag
0-5% Zn
and 0-10% In.

In fact, the alloy disclosed in this reference, as relevant to the present case, is:

70-80% (preferably 75%) Au
3-20% (preferably 4-16%) Pd
1-20% (preferably 5-15%) Fe
0-10% (preferably Cu
0-10% Ag
0-5% Zn
and **10% In.**

With respect to the Indium, the reference actually states "10% total of 0-5% Ni, 0-10% Co, 0-10% Sn and 0-10% In." Therefore, the total of the Nickel, Cobalt, Tin and Indium must be 10%. Since the claimed alloy does not contain Nickel, Cobalt or Tin, in order for the Examiner to apply this reference to this application, the entire 10% must be Indium. Thus, the disclosed range to apply cannot be 0-10% In as asserted by the Examiner but must be the full 10% In.

Therefore, in order to establish a prima facie case of obviousness, even under the broadest reading of *Malagari*, it must be shown that the appropriate potential range of Indium includes the 10% figure. However, the broadest claim includes the language that the proportion of Cu is approximately inversely proportional to that of Pd. Inasmuch as the range of the Pd and Cu is 5-14% and 7-17%, respectively, it follows that the combination of the two elements typically be approximately 21-22%. Adding this to the minimum total of 75% Au produces an alloy of which approximately 95-96% is comprised of Gold, Palladium and Copper. This leaves a maximum of

only 4-5% available for Indium, well below the required 10%.

Furthermore, the examples listed in Table I and II of the application generally support this conclusion. The composition range of Gold, Palladium and Copper is 89% to 99.4%. While it is possible that the Indium could be as high as 11% at the low end of the above range, the examples at the low end of the range, i.e. 89% or 90%, include not less than 3% Silver. Thus, it would be virtually impossible to reach the 10% Indium as disclosed in the cited reference.

More compelling, of course, is that the range of Indium in all the examples is 0-3.5%. Obviously, this does not even approach the 10% disclosed in the cited reference.

Even more importantly, the cited references requires that the alloy have 1-20%, preferably 5-15% Iron. The claimed alloy contains no Iron. Obviously 0% Fe does not fall within, or touch, the 1-20% Fe range of the cited reference. Furthermore, the cited reference prefers 5-15% Fe. The cited reference provides no motivation or suggestion to omit the Iron component and in fact teaches that it is preferred to have at least 5% in the composition.

For the same reasons as discussed above, Applicant likewise asserts that claim 3 is not rendered obvious relying upon the Derwent Abstract reference in combination with STEINKE, ET AL.

Therefore, in light of the arguments relating to the Indium and Iron above, the element ranges do not overlap or touch as asserted by the Examiner. Therefore, even applying a broad interpretation of *Malagali*, the rejection under 35 U.S.C. 103 is improper and should be withdrawn. Applicant respectfully requests that the rejection of claims 1-3 and 5 be withdrawn.

Accordingly, if the Examiner persists in maintaining his rejections, he is respectfully requested to review the Supreme Court's guidance in Graham v. Deere. Under Deere and as set forth in MPEP §706.02, to establish a prima facie case of obviousness the Patent office must (1) set forth the differences in the claim over the applied references; (2) set forth the proposed modification of the references which would be necessary to arrive at the claimed subject matter; and (3) explain why the proposed modification would be obvious.

To satisfy step (3) above, the Examiner must identify where the prior art provides a motivating suggestion to make the modifications proposed in step (2), In re Jones 958 F.2d 347, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992).

The mere fact that the prior art may be modified as suggested by an examiner does not

make the modification obvious unless the prior art suggests the desirability of the modification, In re Fritch, 922 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992).

Properly applying the Deere test requires an examination and analysis of the prior art. It also requires an understanding of the underlying principle of Deere. Deere was intended leave behind discredited tests of patentability like "inventive leap", "flash of genius", etc. and instead simply base the decision to award a patent on whether the structure or method claimed is (i) sufficiently different from and (ii) not suggested by the prior art.

In this regard, it has been established that it is the references, viewed by themselves and not in retrospect, that must suggest doing what Applicant has done. In re Shaffer (CCPA 1956) 229 F.2d 476, 108 USPQ 326, In re Skoll (CCPA 1975) 523 F.2d 1392, 187 USPQ 481.

Related to this, obviousness cannot be established by modifying the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the modification. In re Geiger (CAFC 1987) 815 F.2d 686, 2 P.Q.2d 1276; In re Fine (CAFC 1988) 837 F.2d 1071, 5 P.Q.2d 1596.

Furthermore, it has been established that it is the references, viewed by themselves and not in retrospect, that must suggest doing what Applicant(s) has done. In re Shaffer (CCPA 1956) 229 F.2d 476, 108 USPQ 326, In re Skoll (CCPA 1975) 523 F.2d 1392, 187 USPQ 481.

Also, in rejecting claims under 35 U.S.C. 103, it is well settled that the Examiner must establish the requisite motivation which would have led one of ordinary skill in the art to modify a prior art reference, or to combine prior art references to arrive at the claimed invention. Such motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from knowledge generally available to the skilled artisan. In re Fine, 5 USPQ2d 1596. However, the Examiner has not done so in this case.

Accordingly, the Examiners rejection of claims 1-3 and 5 under 35 U.S.C. 103 is improper and should be withdrawn.

Withdrawal of this ground of rejection is respectfully requested.

Certified copy of the Priority Document

Applicant submits herewith a certified copy of European Patent Application No. 98811224.9, filed December 14, 1999.

CONCLUSION

In view of the foregoing, it is respectfully submitted that claims 1-7 are free of the prior art and otherwise in condition for allowance.

Favorable action with the early allowance of claims 1-7 is most earnestly solicited.

If the Examiner has any questions, or wishes to discuss this matter, please contact the undersigned at the telephone number indicated below.

Respectfully submitted,

Denis VINCENT

Date: 6-22-2000

By CS/
Curtis A. Bell
Reg. No. 36,742

HENDERSON & STURM LLP
206 Sixth Avenue, Suite 1213
Des Moines, Iowa 50309-4076
Telephone: (515) 288-9589
Facsimile: (515) 288-4860

AUG 14 2000

**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/05/00 12/14/99 VINCENT

D 5-10391-026

IN22/0810

EXAMINER

COY, N

HEMERSON & TURNER

200 SIXTH AVENUE

SUITE 1710

DALLAS TEX 75201-4076

ART UNIT

PAPER NUMBER

1742

DATE MAILED:

08/10/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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	Examiner Nicole Coy	Art Unit 1742	

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2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

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4) ☒ Claim(s) 1-7 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-3 and 5 is/are rejected.

7) ☒ Claim(s) 4, 6 and 7 is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

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9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☒ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:

1. ☒ received.

2. ☐ received in Application No. (Series Code / Serial Number) _____.

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14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

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16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

19) ☐ Notice of Informal Patent Application (PTO-152)

20) ☐ Other: _____

Application/Control Number: 09/460,471
Art Unit: 1742

Page 2

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed June 27, 2000 have been fully considered but they are not persuasive. Applicant argues that the Examiner has inadvertently misstated the alloy disclosed in Derwent Abstract RD 199034A reference. The alloy disclosed by this reference is:

70-80 % Au

3-20 % Pd

1-20 % Fe

0-10 % Cu

0-5 % Zn

0-10 % Co

0- 10% Sn

0-10 % In

(total 10 % of In +Sn +Co)

The "comprising" language used by the applicant allows for other elements not claimed by the applicant in the alloy, such as Sn, Co and Fe as in the instant case.

Additionally the examiner finds that applicant arguments directed to selection of ranges within ranges not persuasive. In particular, applicant has shown no unexpected results supporting the selection of applicants particular ranges.

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Applicant argues that the burden is upon the examiner to show motivation to select applicant ranges. The Examiner disagrees with this position and finds it the burden of the applicant to show unexpected results for his selection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derwent Abstract RD 199034A.

Derwent Abstract RD 199034A discloses the invention substantially as claimed.
Derwent Abstract RD 199034A discloses a new white gold alloy which has the composition by weight

70-80% Au

3-20% Pd

0-10 % Cu

0-10 % Ag

0-5% Zn

1-20 % Fe

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Page 4

0-10 % Co

0-10 % Sn

and 0-10 %In (abstract).

Actual overlap of all ingredients in prior art is not required; mere contact (i.e. end-point touching) or CLOSE APPROXIMATION is sufficient to establish prima facie case of obviousness; Titanium Metal Corp v. Banner, (CAFC 1985) 778 F2d 775, 227 USPQ 575.

Since Derwent Abstract RD 199034 discloses the composition of the alloy in which the components and ranges meet or overlap those being claimed, the disclosure establishes a prima facie case of obviousness. *In re Malagari*, 182 USPQ 549.

4. Claim 3 is rejected under 35 USC 103 as being unpatentable over Derwent Abstract RD 199034 in view of Steinke et al.

Derwent Abstract RD 199034 discloses the invention substantially as claimed.
See above paragraph 2.

However, Derwent Abstract RD 199034 does not disclose Ga in amounts between 0.2% and 0.4%.

Steinke et al. teaches Ga in amounts of 0 to 4 % in gold alloys in the same field of endeavor for the purpose of lowering the melting range and improving flowability (Col. 3, lines 3-10).

PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Denis VINCENT
Serial No.: 09/460,471
(claiming priority of European Patent
Application No. 98811224.9, filed December 14, 1999)
Filed: December 14, 1999
For: NICKEL-FREE GREY GOLD ALLOY

RESPONSE UNDER 37 C.F.R. 1.116

BOX NON FEE AMENDMENT
Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

This is in response to the Final Office Action of August 10, 2000.

Reconsideration and withdrawal of the outstanding objections and/or rejections are respectfully requested in view of the new claims, amendments and remarks which follow.

AMENDMENTS**IN THE CLAIMS**

Kindly amend claim 1 as follows:

1. (Twice Amended) A nickel-free [white] grey gold alloy [comprising] consisting essentially of, expressed by weight, Au between 75% and 76% and Pd between 5% and 14%, wherein said alloy furthermore contains between 7% and 17% Cu, wherein the proportion of Cu being approximately inversely proportional to that of Pd, and wherein the balance being formed by at least one of the elements Ir, In, Ag, Zn, Ga, [re] Re, Zr, Nb, Si, Ta and Ti.

Kindly add new claims 8-10 as follows:

8. (New) A nickel-free grey gold alloy comprising, expressed by weight, Au between 75% and 76% and Pd between 5% and 14%, wherein said alloy furthermore contains between 7% and 17% Cu, wherein the proportion of Cu being approximately inversely proportional to that of Pd, and wherein the balance being formed by at least one of the elements Ir, In, Ag, Zn, Ga, Re, Zr, Nb, Si, Ta and Ti., wherein the alloy contains between 20 ppm and 200 ppmTi.

9. (New) The alloy according to Claim 8, wherein said alloy furthermore contains between 12% and 14% by weight Pd, between 7% and 11% by weight Cu, between 1% and 4% In and between 0.01% and 4% by weight of at least one of the elements Ir, Re, Ga, Zn, Si, Nb, Ta and Ti.

10. (New) The alloy according to Claim 9, wherein said alloy contains between 0.2% and 0.4% by weight Ga.

REMARKS

Claim 1 has been amended, and new claims 8-10 have been added. Claims 1-10 remain in the application. Reexamination and reconsideration of the application, as amended, are requested.

Claims 1-2 and 5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Derwent Abstract RD 199034A, and claim 3 was rejected under 35 U.S.C. 103(a) over Derwent Abstract RD 199034A in view of Steinke et al. Claim 1 has now been amended to include the transitional clause "consisting essentially of" which renders the claim closed to elements that would "materially affect the basic and novel characteristics of the claims composition." Atlas Powder Co. v. E.I. du Pont de Nemours & Co., 750 F.2d 1569, 1574, 224 U.S.P.Q. 409, 412 (Fed. Cir. 1984).

Claim 1, as amended, precludes for example the inclusion of Fe and Co. Indeed any Fe content is prohibited for the reasons given at page 2, lines 13-20 of the specification.

**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/460,471	12/14/99	VINCENT	6-1034-026

HENDERSON & STURN
206 SIXTH AVENUE
SUITE 1213
DES MOINES TX 50309-4076

IM62/1113

EXAMINER

COY, N

ART UNIT

PAPER NUMBER

1742

NOV 16 2000

DATE MAILED:

11/19/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Advisory Action	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application No. 09/460,471</td> <td style="width: 50%;">Applicant(s) VINCENT, DENIS</td> </tr> <tr> <td>Examiner Nicole Coy</td> <td>Art Unit 1742</td> </tr> </table>	Application No. 09/460,471	Applicant(s) VINCENT, DENIS	Examiner Nicole Coy	Art Unit 1742
Application No. 09/460,471	Applicant(s) VINCENT, DENIS				
Examiner Nicole Coy	Art Unit 1742				

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 31 October 2000 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY (check only a) or b))

a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.

b) ☐ In view of the early submission of the proposed reply (within two months as set forth in MPEP § 707.07 (f)), the period for reply expires on the mailing date of this Advisory Action, OR continues to run from the mailing date of the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will be entered upon the timely submission of a Notice of Appeal and Appeal Brief with requisite fees.

3. ☒ The proposed amendment(s) will not be entered because:

(a) ☒ they raise new issues that would require further consideration and/or search. (see NOTE below);

(b) ☐ they raise the issue of new matter. (see Note below);

(c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

4. ☐ Applicant's reply has overcome the following rejection(s): _____.

5. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

6. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: of the reason stated in the Final Rejection.

7. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

8. ☒ For purposes of Appeal, the status of the claim(s) is as follows (see attached written explanation, if any):

Claim(s) allowed: 1.

Claim(s) objected to: 4, 6 and 7.

Claim(s) rejected: 1-3 and 5.

Claim(s) withdrawn from consideration: _____.

9. ☐ The proposed drawing correction filed on _____ a) ☐ has b) ☐ has not been approved by the Examiner.

10. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.

11. ☐ Other:

U.S. Patent and Trademark Office

PTO-303 (Rev. 09-00)

Advisory Action

Part of Paper No. 9

Continuation Sheet (PTO-303)

Application NO.

Continuation of 3. ^{amended} NOTE: The term "consisting essentially of" in claim 1, lines 1-2, is not contained in the finally rejected claims; thus they raise new issues that would require further consideration and/or search.

RCV M. 10/10/02
10/10/02 5:33 PM
P-11

PTO/SB/30 (08-00)

Approved for use through 10/31/2002. OMB 0851-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL

Subsection (b) of 35 U.S.C. § 132, effective on May 20, 2000,
provides for continued examination of an utility or plant application
filed on or after June 8, 1995.
See The American Inventors Protection Act of 1999 (AIPA).

Application Number	09/460,471
Filing Date	December 14, 1999
First Named Inventor	Denis VINCENT
Group Art Unit	1742
Examiner Name	N. COY
Attorney Docket Number	6-1034-026

This is a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114 of the above-identified application.

NOTE: 37 C.F.R. § 1.114 is effective on May 29, 2000. If the above-identified application was filed prior to May 29, 2000, applicant may wish to consider filing a continued prosecution application (CPA) under 37 C.F.R. § 1.63 (d) (PTO/SB/28) instead of a RCE to be eligible for the patent term adjustment provisions of the AIPA. See Changes to Application Examination and Provisional Application Practice, Final Rule, 65 Fed. Reg. 50082 (Aug. 10, 2000); Interim Rule, 65 Fed. Reg. 14885 (Mar. 20, 2000), 1233 Off. Gaz. Pat. Office 47 (Apr. 11, 2000), which established RCE practice.

1. Submission required under 37 C.F.R. § 1.114

- a. ☒ Previously submitted
- i. ☒ Consider the amendment(s)/reply under 37 C.F.R. § 1.116 previously filed on October 27, 2000
(Any unentered amendment(s) referred to above will be entered).
- ii. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- iii. ☐ Other _____
- b. ☐ Enclosed
- i. ☐ Amendment/Reply
- ii. ☐ Affidavit(s)/Declaration(s)
- iii. ☐ Information Disclosure Statement (IDS)
- iv. ☐ Other _____


2. Miscellaneous

- a. ☐ Suspension of action on the above-identified application is requested under 37 C.F.R. § 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 C.F.R. § 1.17(i) required)
- b. ☐ Other _____

3. Fees


- The RCE fee under 37 C.F.R. § 1.17(e) is required by 37 C.F.R. § 1.114 when the RCE is filed.
- a. ☐ The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. _____
- i. ☒ RCE fee required under 37 C.F.R. § 1.17(e)
- ii. ☒ Extension of time fee (37 C.F.R. §§ 1.136 and 1.17)
- iii. ☐ Other _____
- b. ☒ Check in the amount of \$ 1,100.00 enclosed
- c. ☐ Payment by credit card (Form PTO-2038 enclosed)

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Name (Print/Type)	Richard L. Fix	Registration No. (Attorney/Agent)	28,297
Signature		Date	December 13, 2000

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner For Patents, Box RCE, Washington, DC 20231, or facsimile transmitted to the U.S. Patent and Trademark Office on: December 13, 2000 via Express Mail Certificate No. EL679461113US

Name (Print/Type)	Richard L. Fix	Date	December 12, 2000
Signature			

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND Fees and Completed Forms to the following address: Assistant Commissioner for Patents, Box RCE, Washington, DC 20231.

Atty. Docket 6-1034-026

PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Denis VINCENT

Group Art Unit: 1742

Serial No.: 09/460,471

Examiner: N. COY

Filed: December 14, 1999

For: NICKEL-FREE GREY GOLD ALLOY

PETITION FOR EXTENSION OF TIMEAssistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

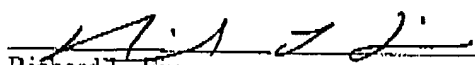
It is respectfully requested that the above-identified Applicant be granted an extension of time for the period of two (2) months from November 10, 2000 to January 10, 2001, in the above-identified application to respond to the outstanding Office Action dated August 10, 2000.

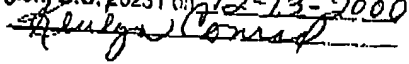
Enclosed is a check which covers the amount of \$390.00 for the time extension. Any deficiency or overpayment should be charged or credited to deposit account number 08-1650.

If the Examiner has any questions, or wishes to discuss this matter, please contact the undersigned at the telephone number indicated below.

Respectfully submitted,

Denis VINCENT

Dated: 12-13-00HENDERSON & STURM LLP
206 Sixth Avenue, Suite 1213
Des Moines, Iowa 50309-4076
Richard L. Fix
Reg. No. 28,297Telephone: (515) 288-9589
Facsimile: (515) 288-4860

EXPRESS MAIL CERTIFICATE
No. EL6794611345
I hereby certify that this paper or fee is being deposited with the U.S. Postal Service using "Express Mail-Post Office to Addressee" service under 37 CFR 1.10 and addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231 on 12-13-2000


F:\DC_Data\6-1034\026\ExtendTime.wpd

**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/460,471	12/14/99	VINCENT	6-1034-026

JAN 27 2001

D

HENDERSON & STURM
206 SIXTH AVENUE
SUITE 1219
DES MOINES IA 50309-4076

IM22/0119

EXAMINER

COY, N

ART UNIT	PAPER NUMBER
----------	--------------

1742

DATE MAILED: 01/19/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/460,471

Applicant(s)

VINCENT, DENIS

Examiner

Nicole Coy

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

Application/Control Number: 09/460,471
Art Unit: 1742

Page 2

DETAILED ACTION***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derwent Abstract RD 199034A.

Derwent Abstract RD 199034A discloses the invention substantially as claimed.

Derwent Abstract RD 199034A discloses a new white gold alloy which has the composition by weight

70-80% Au

3-20% Pd

1-20% Fe

0-10 % Cu

0-10 % Ag

0-5% Zn

0-10 % Co

0-10 % Sn

and 0-10 %In (abstract).

PATENTS**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Denis VINCENT

Serial No.: 09/460,471
(claiming priority of European Patent
Application No. 98811224.9, filed December 14, 1999)

Filed: December 14, 1999

For: NICKEL-FREE GREY GOLD ALLOY

AMENDMENT

BOX NON-FEE AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

This is in response to the Office Action of January 19, 2001.

AMENDMENTS**IN THE CLAIMS**

PLEASE SUBSTITUTE THE FOLLOWING CLAIM 1 FOR THE PENDING CLAIM 1:

Claim 1. (Thrice Amended) A grey gold alloy comprising, expressed by weight, Au between 75% and 76% and Pd between 5% and 14%, wherein said alloy furthermore contains between 7% and 17% Cu, wherein the proportion of Cu being approximately inversely proportional to that of Pd, and wherein the balance being formed by at least one of the elements Ir, In, Ag, Zn, Ga, Re, Zr, Nb, Si, Ta and Ti, wherein said alloy is substantially free of Ni, Co and Fe.

Kindly add new claims 11-13 as follows:

11. (New) A nickel-free grey gold alloy comprising, expressed by weight, Au between 75% and 76% and Pd between 5% and 14%, wherein said alloy furthermore contains between 7% and 17% Cu, wherein the proportion of Cu being approximately inversely proportional to that of Pd, and wherein the balance being formed by at least one of the elements Ir, In, Ag, Zn, Ga, Re, Zr, Nb, Si, Ta and Ti., wherein the alloy contains about 100 ppmTi.

12. (New) The alloy according to Claim 11, wherein said alloy furthermore contains between 12% and 14% by weight Pd, between 7% and 11% by weight Cu, between 1% and 4% In and between 0.01% and 4% by weight of at least one of the elements Ir, Re, Ga, Zn, Si, Nb, Ta and Ti.

13. (New) The alloy according to Claim 12, wherein said alloy contains between 0.2% and 0.4% by weight Ga.

REMARKS

Applicant thanks the Examiner for the courtesy of allowing a telephone interview on March 14, 2001. In view of this discussion, claim 1 has been amended, and new claims 11-13 have been added. Claims 1-13 remain in the application. Reexamination and reconsideration of the application, as amended, are requested.

Claims 1-2 and 5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Derwent Abstract RD 199034A, and claim 3 was rejected under 35 U.S.C. 103(a) over Derwent Abstract RD 199034A in view of Steinke et al. Claim 1 has now been amended back to include the transitional clause "comprising" together with the specific requirement that the alloy is substantially free of Ni, Co and Fe.

Claim 1, as amended, precludes the inclusion of Fe. Indeed any Fe content is prohibited for the reasons given at page 2, lines 13-20 of the specification. The exclusion of Fe materially changes the characteristics of the alloy since conventional casting techniques in making jewelry and watches, such as the lost-wax casting technique, could not be used with an alloy

incorporating Fe. The primary reference, Derwent Abstract RD 199034A teaches 1% minimum Fe.

Also, one of the aims of the claimed alloy is to be free from Ni in order to avoid problems associated with the allergy caused by nickel. Since Co is known to cause similar problems, it is also excluded from the alloy. Since claim 1 specifically requires that the alloy be free of both Ni and Co, the characteristics of the claimed alloy are materially changed.

It is believed that claim 1, as amended, is patentably distinguishable over the references of record considered individually or in combination. Dependent claims 2-7 are likewise believed to be allowable.

Claims 4, 6 and 7-9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Derwent Abstract RD 199034A in view of Leuser, and claim 10 was rejected under 35 U.S.C. 103(a) over Derwent Abstract RD 199034A in view of Leuser and further in view of Steinke et al.

Claims 4 and 6-10 contain the limitation that the alloy must contain Ti in the range of 20 ppm to 200 ppm. The Leuser reference defines a "small quantity" as a quantity preferably not exceeding 4%. The specific examples of Leuser show amounts only as low as 0.03% or 300 ppm. This quantity is far above the range of 20-200 ppm required in the claims.

The lower range is critical when using the lost-wax casting technique. Following are Applicant's comments concerning this issue:

"The Titanium content is critical as only limited vacuum is created during the jewelry lost-wax casting process. The Titanium will consequently be oxidized.

A thin layer of oxides forms on the surface of the metal whilst in the crucible. A content greater than 200 ppm of Titanium produces a thick layer of oxides which could flow into the mould with the metal. If this happens, the pieces will be spoilt."

Applicant's comments may be submitted in a Declaration if the Examiner so requires.

New claims 11-13 are submitted to further limit the amount of Ti to "about 100 ppm". Basis of the new claims is found in the specification at page 3, lines 8-13. Table I (Examples 12 and 13), and Table II (Example 8).

No additional claim fee is required by this amendment.

In view of the above, it is believed that remaining claims 1-13 are now in condition for allowance. Such favorable action is earnestly solicited.

**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/460,471	12/14/99	VINCENT	D C-1034-026

HENDERSON & STURM
206 SIXTH AVENUE
SUITE 1213
DEN MOINES TX 50309-4076

IMS2/0315

MAR 23 2001

EXAMINER

CCY, N

ART UNIT PAPER NUMBER

1742

DATE MAILED: 03/15/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Interview Summary	Application No.	Applicant(s)	
	09/460,471	VINCENT, DENIS	
	Examiner	Art Unit	
	Nicole Coy	1742	

All participants (applicant, applicant's representative, PTO personnel):

(1) Nicole Coy.

(3) _____

(2) Richard Fix.

(4) _____

Date of Interview: 14 March 2001.

Type: a) ☒ Telephonic b) ☐ Video Conference
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.
If Yes, brief description: .

Claim(s) discussed: 1-10.

Identification of prior art discussed: Derwent Abstract RD 199034A, Leuser.

Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

i) ☒ It is not necessary for applicant to provide a separate record of the substance of the interview (if box is checked).

Unless the paragraph above has been checked, THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Nicole Coy
Examiner's signature (if required)

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiner's Amendment, no separate Interview Summary Record is required.

The interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case unless both applicant and examiner agree that the examiner will record same. Where the examiner agrees to record the substance of the interview, or when it is adequately recorded on the Form or in an attachment to the Form, the examiner should check the appropriate box at the bottom of the Form which informs the applicant that the submission of a separate record of the substance of the interview as a supplement to the Form is not required.

It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

**UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
6-10032-0001	12/10/02	VINCENT	6-10032-0001

JUN 02 2001

IN22/0529

HERNDERSON & STORM
206 SIXTH AVENUE
SUITE 1218
DALLAS TEX 75201-4076

EXAMINER

DOY, N

ART UNIT

PAPER NUMBER

1762

"E"

DATE MAILED:

05/29/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/460,471	Applicant(s) VINCENT, DENIS	
	Examiner Nicole Coy	Art Unit 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 20 April 2001.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-13 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-13 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)

16) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

19) ☐ Notice of Informal Patent Application (PTO-152)

20) ☐ Other: _____

Application/Control Number: 09/460,471
Art Unit: 1742

Page 3

USPQ 575. It is the burden of the applicant to provide the criticality of the range of 20-200 ppm Ti.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent No. 09-184033.

Japanese Patent No. 09-184033 discloses the invention substantially as claimed. Japanese Patent No. 09-184033 discloses (see abstract) a white gold alloy comprising Au between 40 % and 77 % and Pd between 0 % and 49 %, wherein said alloy furthermore contains between 10 –20 % Cu and further containing 0.5 – 5% of at least one of Zn, In, and Ir.

However, Japanese Patent No. 09-184033 does not disclose the proportion of Cu being approximately inversely proportional to that of Pd.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to find the optimum ratio between Cu and Pd, since it has been held that where the general conditions of a claim are disclosed in the prior art, it is not

Application/Control Number: 09/460,471
Art Unit: 1742

Page 4

inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 105 USPQ 233.

5. Claim 3 is rejected under 35 USC 103 as being unpatentable over Japanese Patent No. 9184033 in view of Steinke et al.

Japanese Patent No. 9184033 discloses the invention substantially as claimed (see paragraph 4 above).

However, Japanese Patent No. 9184033 does not disclose Ga in amounts between 0.2% and 0.4%.

Steinke et al. teaches Ga in amounts of 0 to 4 % in gold alloys in the same field of endeavor for the purpose of lowering the melting range and improving flowability (Col. 3, lines 3-10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Japanese Patent No. 9184033 by adding Ga in an amount of 0.2 to 0.4 % to a white gold alloy as taught by Steinke et al. in order to improve the properties of a white gold alloy.

6. Claims 4 - 6 and 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent No. 9184033 in view of Leuser.

Japanese Patent No. 9184033 discloses the invention substantially as claimed (see paragraph 4 above).

Application/Control Number: 09/460,471
Art Unit: 1742

Page 5

However, Japanese Patent No. 9184033 does not disclose adding 20 to 200 ppm Ti.

Leuser teaches (Col. 2, lines 1-3) adding small quantities of agents, i.e. titanium, having a deoxidizing action to a gold alloy in the same field of endeavor for the purpose of deoxidizing the alloy.

It would have been obvious to one having ordinary skill in the art at the time the invention as made to modify Japanese Patent No. 9184033 by adding a small amount of titanium as taught by Leuser in order to increase the deoxidizing action of the gold alloy.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent No. 9184033 in view of Steinke et al. and further in view of Leuser.

Japanese Patent No. 9184033 in view of Steinke et al. discloses the invention substantially as claimed (see paragraph 5 above).

However, Japanese Patent No. 9184033 in view of Steinke et al. does not disclose adding 20 to 200 ppm Ti.

Leuser teaches (Col. 2, lines 1-3) adding small quantities of agents, i.e. titanium, having a deoxidizing action to a gold alloy in the same field of endeavor for the purpose of deoxidizing the alloy.

It would have been obvious to one having ordinary skill in the art at the time the invention as made to modify Japanese Patent No. 9184033 in view of Steinke et al. by

PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Denis VINCENT

Group Art Unit: 1742

Serial No.: 09/460,471

Examiner: N. COY

Filed: December 14, 1999

For: NICKEL-FREE GREY GOLD ALLOY

AMENDMENT AFTER FINAL

BOX NON-FEE AMENDMENT
Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

This is in response to the Office Action of May 29, 2001.

IN THE CLAIMS

Kindly cancel claims 1-3 and 5 without prejudice to Applicant's option to file a Continuation application asserting these claims.

REMARKS

Claims 1-3 and 5 have been cancelled. Claims 4 and 6-13 remain in the application. Reexamination and reconsideration of the application, as amended, are requested.

Submitted herewith is Applicant's Declaration showing the criticality of the Ti range specified in claims 4 and 6-13. The Declaration includes comparative tests showing data points below 20 ppm Ti, above 200 ppm Ti, and between 20 and 200 ppm Ti.

PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

VIA TELEFAX

ATTENTION: EXAMINER N. COY

Applicant: Denis VINCENT

Group Art Unit: 1742

Serial No.: 09/460,471

Filed: December 14, 1999

For: NICKEL-FREE GREY GOLD ALLOY

SUPPLEMENTAL AMENDMENT AFTER FINAL

BOX NON-FEE AMENDMENT

Assistant Commissioner for Patents

Washington, D.C. 20231

Dear Sir:

IN THE CLAIMS

Kindly cancel claims 4, 6 and 7 and substitute new claims 14-16 therefor.

14. (New) A grey gold alloy comprising, expressed by weight, Au between 75% and 76% and Pd between 5% and 14%, wherein said alloy furthermore contains between 7% and 17% Cu, wherein the proportion of Cu being approximately inversely proportional to that of Pd, and wherein the balance being formed by at least one of the elements Ir, In, Ag, Zn, Ga, Re, Zr, Nb, Si, Ta and Ti, wherein said alloy is substantially free of Ni, Co and Fe, and wherein said alloy contains between 20 ppm and 200 ppm Ti.

15. (New) The alloy according to Claim 14, wherein said alloy furthermore contains between 12% and 14% by weight Pd, between 7% and 11% by weight Cu, between 1% and 4% by weight In and between 0.01% and 4% by weight of at least one of the elements Ir, Re, Ga, Zn, Si, Nb, Ta and Ti.

Supplemental Amendment After Final.doc

DEC-10-02 TUE 05:00 PM H & S - DM

FAX NO. 5152884860

P. 03



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO. 7	FILING DATE 1/10/02	VT NO. 1	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. 01-1001-000
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IN22/0810

BERNARDSON & STURM
206 SIXTH AVENUE
SUITE 1215
DAL HOUSTON TX 77002-4076

AUG 14 2001

EXAMINER

ART UNIT 1/10/02	PAPER NUMBER 17
------------------	-----------------

DATE MAILED: 08/10/01
"8"

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks


UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
NOTICE OF ALLOWANCE AND ISSUE FEE DUE

IMP2/0810

HERBERT & STORM
 206 SIXTH AVENUE
 SUITE 1213
 NEW YORK, NY 10011-4076

APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
003450, 121	12/13/90	1	1742	08/10/01
First Named Applicant	VINCENT	35 USC 151(b) term ext. = 0 Days.		

TITLE OF INVENTION: **NICKEL-FREE CRY GOLD ALLOY**
 INVENTION

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
1	420-500.000	134	UTILITY	NO	\$1240.00	11/13/01

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.

HOW TO RESPOND TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
- B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

A. Pay FEE DUE shown above, or

B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give application number and batch number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents Issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

YOUR COPY

Notice of Allowability**Application No.**

09/460,471

Applicant(s)

VINCENT, DENIS

Examiner

Nicole Coy

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/27/01.
2. ☒ The allowed claim(s) is/are 8-16.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ | 6 <input type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

ROY KING

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

PART B—ISSUE FEE TRANSMITTAL

Complete and mail this form, together with fee(s), to: **Box ISSUE FEE**
Assistant Commissioner for Patents
Washington, D.C. 20231

MAILING INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE. Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Issue Fee Receipt, the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

HENDERSON & STURM
 206 SIXTH AVENUE
 SUITE 1213
 DES MOINES TX 50309-4076

IM22/0810

Note: The certificate of mailing below can only be used for domestic mailings of the Issue Fee Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing.

Certificate of Mailing

I hereby certify that this Issue Fee Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above on the date indicated below.

Kerilyn Conrad (Depositor's name)

Kerilyn Conrad (Signature)

November 9, 2001 (Date)

APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
09/460,471	12/14/99	009 COY, N	1742	08/10/01
First Named Applicant	VINCENT,	35 USC 154(b) term ext. =	0 Days.	

TITLE OF INVENTION **NICKEL-FREE GREY GOLD ALLOY**

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
1 6-1034-026	420-508.000	K34	UTILITY	NO	\$1240.00	11/13/01

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Use of PTO form(s) and Customer Number are recommended, but not required.

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" Indication (or "Fee Address" Indication form PTO/SB/47) attached.

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 **HENDERSON & STURM LLP**

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)
PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the PTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE **METALOR TECHNOLOGIES INTERNATIONAL SA**

(B) RESIDENCE: (CITY & STATE OR COUNTRY)

CH 2009 NEUCHATEL, SWITZERLAND

Please check the appropriate assignee category indicated below (will not be printed on the patent)

☐ Individual ☒ corporation or other private group entity ☐ government

4a. The following fees are enclosed (make check payable to Commissioner of Patents and Trademarks):

☒ Issue Fee

☐ Advance Order - # of Copies _____

4b. The following fees or deficiency in those fees should be charged to:

DEPOSIT ACCOUNT NUMBER _____
 (ENCLOSE AN EXTRA COPY OF THIS FORM)

☐ Issue Fee

☐ Advance Order - # of Copies _____

The COMMISSIONER OF PATENTS AND TRADEMARKS IS requested to apply the Issue Fee to the application identified above.

(Authorized Signature)

(Date)

NOTE: The Issue Fee will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the Patent and Trademark Office.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending on the needs of the individual case. Any comments on the amount of time required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND FEES AND THIS FORM TO: Box Issue Fee, Assistant Commissioner for Patents, Washington D.C. 20231

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMIT THIS FORM WITH FEE



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20590
www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/460,471	01/29/2002	6342182	6-1034-026	2510

7590

01/11/2003

HENDERSON & STURM
206 SIXTH AVENUE
SUITE 1213
DES MOINES, TX 503094076

JAN 25 2002**ISSUE NOTIFICATION**

The projected patent number and issue date are specified above.

APPLICANT(S):

DENIS VINCENT, NEUCHATEL, SWITZERLAND;

PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Denis VINCENT
Serial No.: Not yet assigned
(claiming priority of European Patent
Application No. 98811224.9, filed December 14, 1999)
Filed: (on even date herewith)
For: NICKEL-FREE GREY GOLD ALLOY

PRELIMINARY AMENDMENT

BOX NON-FEE AMENDMENT
Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Prior to the calculation of fees and the examination of the above-identified application,
kindly amend the application as follows:

AMENDMENTIn the Claims:

Kindly amend the claims as follows:

1. (Amended) A nickel-free [Nickel-free] white gold alloy comprising, expressed by weight, Au between 75% and [-] 76% and Pd between 5% and 14%, [characterized in that it] wherein said alloy furthermore contains between 7% and 17% Cu, wherein the proportion of Cu being approximately inversely proportional to that of Pd, and wherein the balance being formed by at least one of the elements Ir, In, Ag, Zn, Ga, Re, Zr, Nb, Si, Ta and Ti.

2. (Amended) The alloy [Alloy] according to Claim 1, [characterized in that it] wherein said alloy furthermore contains between 12% and 14% by weight Pd, between 7% and 11% by weight Cu, between 1% and 4% In and between 0.01% and 4% by weight of at least one of the elements Ir, Re, Ga, Zn, Si, Nb, Ta and Ti.

F:\XC1_Data\1034\026\Preliminary Amendment

3. (Amended) The alloy [Alloy] according to Claim 2, [characterized in that it] wherein said alloy contains between 0.2% and 0.4% by weight Ga.
4. (Amended) The alloy [Alloy] according to [one of the preceding claims] claim 1, [characterized in that it] wherein said alloy contains between 20 ppm and 200 ppm Ti.
5. (Amended) The alloy [Alloy] according to Claim 1, [characterized in that it] wherein said alloy contains between 5% and 7% Pd, [<] less than 5% Ag, [<] less than 7% Zn, and wherein the balance comprising at least one of the elements Ir, In, Ta, Si, Ga and Ti in a proportion of between 0.002% and 0.015% by weight.
6. (New) The alloy according to claim 2, wherein said alloy contains between 20 ppm and 200 ppm Ti.
7. (New) The alloy according to claim 3, wherein said alloy contains between 20 ppm and 200 ppm Ti.

IN THE SPECIFICATION

Kindly amend the specification as follows:

Kindly amend the specification with the section headings as follows:

On page 1, before line 1, insert:

--- Title of the Invention ---.

On page 1, after line 1, insert:

--- Cross-Reference to Related Applications

Not Applicable.

Statement Regarding Federally
Sponsored Research or Development

Not Applicable.

Background of the Invention:

1. Field of the Invention ---.

On page 1, between lines 5 and 6, kindly insert:

--- 2. Description of the Prior Art ---.

On page 1, between lines 34 and 35, kindly insert:

--- Detailed Description of the Invention ---.

On page 2, line 2, delete "according to claim 1" and insert therefor --- as described below

--- Detailed Description of the Invention ---.

On page 7, line 1, kindly delete "CLATMS", and substitute therefor:

--- Claims

What is Claimed is: ---.

On page ____, kindly substitute the following for the Abstract, also submitted as a separate page:

--Abstract of the Disclosure

A nickel-free white gold alloy comprises, expressed by weight, in addition to between 75% and 76% Au and between 5% and 14% Pd, between 7% and 17% of Cu, the proportion of Cu being approximately inversely proportional to that of Pd, and the balance being formed by at least one of the elements Ir, In, Ag, Zn, Ga, Re, Zr, Nb, Si, Ta and Ti.--.

REMARKS

Claims 1-7 are pending in the above-identified application.

Claims 1-5 have been amended to eliminate multiple dependent claims and the United States Patent and Trademark Office fee charged therefor and/or to more particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 6 and 7 have been added in order to define the invention in a manner consistent with selected original multiple dependent claims without incurring an extra claims fee.

No new matter is believed to have been introduced by this amendment.

CONCLUSION

Favorable action is most earnestly solicited.

If the Examiner has any questions, or wishes to discuss this matter, please contact the undersigned at the telecommunication numbers listed below.

Respectfully submitted,

Denis VINCENT

Date

HENDERSON & STURM LLP
206 Sixth Avenue, Suite 1213
Des Moines, Iowa 50309

Telephone: (515) 288-9589
Telefax: (515) 288-4860

By _____

Curtis A. Bell
Reg. No. 36,742

Abstract of the Disclosure

A nickel-free white gold alloy comprises, expressed by weight, in addition to between 75% and 76% Au and between 5% and 14% Pd, between 7% and 17% of Cu, the proportion of Cu being approximately inversely proportional to that of Pd, and the balance being formed
5 by at least one of the elements Ir, In, Ag, Zn, Ga, Re, Zr, Nb, Si, Ta and Ti.

NICKEL-FREE GREY GOLD ALLOY

The present invention relates to a nickel-free grey gold alloy comprising 75-76% by weight of Au and
5 between 5 and 14% by weight of Pd.

Problems associated with the allergy caused by nickel have led to the presence of nickel in white or grey gold alloys being reduced or even prohibited. In addition, these alloys are excessively hard and not
10 very deformable so that they do not lend themselves well to work in particular in the fields of jewellery and watchmaking.

A nickel-free grey gold alloy having good deformability has already been proposed in CH-684,616,
15 this alloy generally comprising, in this case, essentially between 15% and 17% by weight of Pd, between 3 and 5% of Mn and between 5 and 7% by weight of Cu. Pd is a very expensive metal, the cost of which fluctuates enormously. Lowering the proportion of Pd of
20 the abovementioned alloy and adding Ag thereto result in a low deformability. Furthermore, too high a percentage of Ag causes the alloy to tarnish.

Moreover, JP-A-90/8160 has disclosed a ternary grey gold alloy with more than 10% by weight of Pd and
25 more than 10% by weight of Cu, the amounts of Pd and Cu being the same, which means that the higher the Pd content the more the copper content increases, and vice versa. This amounts to saying that, for an 18 ct alloy, the respective Pd and Cu contents may only be 12.5%
30 respectively. Furthermore, such a ternary alloy does not have the moulding properties allowing it to be used, in particular, with the so-called lost-wax technique.

The object of the present invention is to
35 substantially improve white or grey gold alloys, allowing the proportion of Pd to be reduced without reducing its deformability properties, as well as its metallurgical properties allowing it to be used in lost-wax casting techniques.

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For this purpose, the subject of this invention is a nickel-free grey gold alloy according to Claim 1.

Surprisingly, it has been found that it is possible to limit, or even reduce substantially, the proportion of Pd without impairing either the whiteness of the alloy or its metallurgical and mechanical properties, which may even be improved, by a substantial increase in the proportion of Cu. It has even been possible to show that the less Pd used the more the proportion of Cu can be increased without impairing either the colour or the desired deformability properties.

Furthermore, the incorporation of ferrous metals is also avoided so that the alloy can be used with conventional casting techniques in making jewellery and watches, as well as in the art of making dental prostheses, in which the so-called lost-wax technique is used, this being most advantageous in the case of short runs or even in the production of one-off components.

Certain other elements are added to the main elements of this alloy in order to improve its metallurgical properties, in particular to lower its melting point, to improve the grain fineness and to avoid porosity.

The invention will now be described with the aid of two series of examples, a first series being more especially aimed at a proportion of Pd lying around 13% and a second series aimed at a proportion of Pd lying around 7%. As will be seen, in both cases the role of the copper is paramount. In the second case, and even if the reduction by almost half in the Pd content is partly compensated for by adding Ag and Zn, the copper content is increased by about 30% compared with the alloys of the first series.

Various other elements are incorporated in small or even very small proportions, in order to improve the properties of the alloy. Ir and Re may be

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added as grain refiners, and In allows the melting point to be lowered. This lowering of the melting point is a great advantage in casting using conventional moulds made of SiO_2 or plaster of Paris, since it prevents reaction between the components of the mould and, in particular, it prevents the production of SO_2 which poisons the gold alloy.

In order to improve the surface finish, it is also possible to add one of the following elements: Ti, Zr, Nb, Si and Ta, in a proportion of about 100 ppm. Although it is sought to lower the melting point of the alloy, as explained above, this is an additional safety measure.

In the examples which follow, Table I relates to the first series of alloys while Table II relates to the second series.

Apart from the composition of the alloys, given in % by weight, these tables give information relating to the hardness of the alloy in the moulded, annealed and work-hardened state, as well as the colour measured in a three-axis coordinate system. This three-dimensional measurement system is called CIELab, CIE being the acronym for Commission Internationale de l'Eclairage [International Illumination Commission] and Lab referring to the three coordinate axes, the L^* axis measuring the black-white component (black = 0; white = 100), the a^* axis measuring the red-green component (redness: positive a^* , greenness: negative a^*) and the b^* axis measuring the yellow-blue component (yellowness: positive b^* , blueness: negative b^*). For more details on this measurement system, reference may be made to the article "The Colour of Gold-Silver-Copper Alloys" by R.M. German, M.M. Guzowski and D.C. Wright, Gold Bulletin 1980, 13, (3), pages 113-116.

Finally, these tables also indicate, in the two columns F, the melting ranges expressed in $^{\circ}\text{C}$ and the percentage deformability (% def).

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In Table I, Examples 2, 3, 4 have a relatively low deformability, so that these alloys do not lend themselves to applications in which a high degree of deformability is required.

5 Examples 4, 8, 9 and 11 in this same Table I exhibit saturation in the yellow, expressed by the relatively high b^* value, compared with the controls and with the other alloys of this same category, that is to say containing between 12 and 14% Pd.

10 With regard to Examples 2 and 6 of this same table, it may be seen that they are relatively soft after casting.

15 With regard to Table II, it may be seen that too high a proportion of Ag increases the b^* value (saturation in the yellow). For this type of alloy, it is desirable for the b^* value not to exceed 13 so that the percentage of Ag is preferably $< 5\%$.

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TABLE I

	Au	Pd	Ir	Cu	In	Re	Ga	Zn	Other		F	L	a*	b*	Hv cast	Hv	Hv ec.	% déf.
	%	%	%	%	%	%	%	%	%	%								
1	75	14	0	7,4	0	0	0	3,5	0	0	1030	1098	81,2	1,8	7,52			
2	75	14	0,01	7,4	3,5	0	0	0	0	0			81	2	7,63	145	188	250
3	75	14	0	7,4	3,5	0,01	0	0	0	0,01	1032	1110				248		53
4	75	14	0,01	7,4	3,3	0,002	0,2	0	0	0	1080	1130	81,3	2,26	9,75	262	185	250
5	75	13	0,01	9,4	2,3	0,002	0,2	0	0	0	1028	1126	80,4	2,2	8,12	219	160	240
6	75	13	0,01	10,4	1,5	0,002	0	0	0	0	1040	1115	80,7	2,16	7,1	150	132	251
7	75	13	0,01	8,9	1	0,002	0	2	0	0	1015	1090	86,8	2	8	183	145	274
8	75	13	0,005	10,2	1,5	0,002	0,2	0	0	0	1005	1110	79,7	2,28	8,66	178	102	241
9	75	13	0,005	6,3	2,2	0,002	0,35	0	3	0	1030	1145	81,2	2,1	8,37	210	132	274
10	75	13	0,006	10	1,5	0,002	0,35	0	0	0,01	995	1095	80,9	2,03	7,51	200	145	230
11	75	13	0,006	10	1,5	0,002	0,35	0	0,032	0,01	1015	1105	81,1	2,2	8,89	198	120	226
12	75	13	0,006	10	1,5	0,002	0,35	0	0,01	0	1035	1115	79,9	2,12	7,75	210	145	241
13	75	12	0,006	12,4	0	0,002	0	0	0,01	0	995	1090	79,5	2,14	8,06	140	120	241
Controls																		
	Au	Pd	Ir	Cu	In	Ag	Ni	Zn	Other		F	L	a*	b*				
	%	%	%	%	%	%	%	%	%	%								
	75	13	0	7,5	0	0	2	2		0	1035	1100	82,21	1,43	7,75			
	75	13	0	7,8	2	0	2	0		0	1060	1105	83	1,46	7,75			
	75	13	0	5	0	3,3	1,8	1,8		0	1055	1120	86,65	1,27	7,88			
	75	13	0	9,5	0	0	2	0		0	1080	1130	82,96	1,43	6,99			
	75	15	0	5	0	0	5	0		0	1110	1155	82,83	0,96	6,65			

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TABLE II

	Au	Pd	Ir	Cu	In	Ag	Re	Zn	Other			F	L	a*	b*	Hv		% déf.
	%	%	%	%	%	%	%	%	%	%	%					Hv cast	Hv ec.	
1	75	7	0,01	12,9	0	2	0	3	0	0	0	940	85,12	1,59	14,72	195	165	
2	75	6	0,01	12,9	0	2	0	4	0	0	0	905	82,8	3,6	11,95	205	178	86
3	75	7	0,01	11,7	2	4	0,002	0	0	0	0,2	Ga	89,9	2,96	10,55	218	150	82
4	75	7	0,06	7,4	1,2	3	0,002	6	0	0	0,2		81,7	4,14	12,65	185	171	78
5	75	7	0,01	7	1,2	7	0,002	2,5	2,5	0	0,2	Ga	85,4	1,79	15,04	220	150	80
6	75	7	0,01	7,5	1,5	8,7	0,002	0	0,012	0,01	0,2	Ta+Si+Ga	84	2,34	14,18	191	117	80
7	75	7	0,01	11	0	0	0,002	7	0	0	0	880	83,7	3,06	14,02	203	222	80
8	75	7	0,01	10	0	0,9	0,002	7	0	0	0,01	Tl	83,2	2,79	14,26	208	155	82
9	75	5	0,01	13	0	0	0,002	6,9	0	0	0,01		85	2,36	14,27	248	178	80
10	75	4	0,01	16,9	0	0	0,002	4	0	0	0,01		85,6	2,43	16,1	314	246	80
11	75	5	0,01	12,9	0	2	0,002	5	0	0	0,01		85,6	4,43	15,2	208	185	80
12	75	6	0,01	12,9	0	2	0,002	4	0	0	0,01		81,1	2,98	13,98	206	188	80
13	75	7	0,01	12,9	0	1	0,002	4	0	0	0,01		80,6	3,24	12,19	210	188	80
14	75	7	0,01	13,9	0	1	0,002	3	0	0	0,01		79,5	3,4	11,3			

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CLAIMS

1. Nickel-free white gold alloy comprising, expressed by weight, Au 75-76% and Pd between 5 and 14%, characterized in that it furthermore contains between 7 and 17% Cu, the proportion of Cu being approximately inversely proportional to that of Pd, the balance being formed by at least one of the elements Ir, In, Ag, Zn, Ga, Re, Zr, Nb, Si, Ta and Ti.
2. Alloy according to Claim 1, characterized in that it furthermore contains between 12 and 14% by weight Pd, between 7 and 11% by weight Cu, between 1 and 4% In and between 0.01 and 4% by weight of at least one of the elements Ir, Re, Ga, Zn, Si, Nb, Ta and Ti.
3. Alloy according to Claim 2, characterized in that it contains between 0.2 and 0.4% by weight Ga.
4. Alloy according to one of the preceding claims, characterized in that it contains between 20 and 200 ppm Ti.
5. Alloy according to Claim 1, characterized in that it contains between 5 and 7% Pd, < 5% Ag, < 7% Zn, the balance comprising at least one of the elements Ir, In, Ta, Si, Ga and Ti in a proportion of between 0.002 and 0.015% by weight.

ABSTRACT

This nickel-free white gold alloy comprises, expressed by weight, in addition to 75-76% Au and between 5 and 14% Pd, between 7 and 17% of Cu, the proportion of Cu being approximately inversely proportional to that of Pd, the balance being formed by at least one of the elements Ir, In, Ag, Zn, Ga, Re, Zr, Nb, Si, Ta and Ti.

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DETAILED ACTION***Allowable Subject Matter***

1. The following is an examiner's statement of reasons for allowance: The declaration of July 27, 2001 shows the criticality of the Ti range specified in claims 8-16, thus overcoming the prior art rejection over Japanese Patent No. 9-184033 in view of Leuser. The declaration shows comparative tests showing data points within applicant's range, above applicant's range, and below applicant's range. Applicant demonstrates unexpected results within the claimed range, the reduction of defects. Therefore, claims 8-16 are allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole Coy whose telephone number is (703)308-3860. The examiner can normally be reached on Monday-Friday 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703)308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3599 for regular communications and (703)305-7719 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0651.

Nicole A. Coff

nac
August 5, 2001

Roy King
ROY KING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

**Attachment for PTO-948 (Rev. 03/01, or earlier)
6/18/01**

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT of the application.**

06/01/01